What is claimed is:

1. A method to determine the immune status of an animal, said method comprising the steps of:

(a) contacting a biological specimen of said animal with a recombinant infectious agent antigen that is specific for detecting an antibody selective for said infectious agent, under conditions suitable for formation of a complex between said recombinant antigen and said antibody; and

(b) detecting the presence or absence of said complex, wherein presence or absence of said complex is indicative of the immune status of said animal.

2. The method of Claim 1, wherein presence of said complex is indicative of non-susceptibility to infection by said infectious agent.

3. The method of Claim 1, wherein said antibody is selected from the group consisting of a maternally-derived antibody, an antibody generated in response to natural infection by said infectious agent and an antibody generated in response to vaccination against said infectious agent.

4. The method of Claim 1, wherein said biological specimen is selected from the group consisting of blood, serum, plasma, saliva, urine, tears, aqueous humor, cerebrospinal fluid, lymph, nasal secretion, tracheobronchial aspirate, milk, colostrum, intestinal secretion, and feces.

5. The method of Claim 1, wherein said animal is selected from the group consisting of a cat, dog, and horse.

6. The method of Claim 1, wherein said recombinant antigen is immobilized on a substrate.

7. The method of Claim 1, wherein said method comprises performing an assay selected from the group consisting of an enzyme-linked immunoassay, a radioimmunoassay, a fluorescence immunoassay, a luminescence assay, a phosphorescence assay, an immunoblot assay, an immunodot assay, an immunoprecipitation assay, a lateral flow assay, a flow-through assay, an agglutination assay, a particulate-based assay, and an electronic sensory assay.

8. The method of Claim 1, wherein said step of detecting comprises applying a detection reagent that binds to said complex, if present, to obtain a test signal, wherein presence or absence of a test signal is indicative of the immune status of said animal.

9. The method of Claim 8, wherein said detection reagent comprises an antibody-binding partner conjugated to a detectable marker.

10. The method of Claim 9, wherein said antibody-binding partner is selected from the group consisting of an Fc-binding antibody, an Fc receptor, and an antibody-binding bacterial surface protein.

11. The method of Claim 9, wherein said detectable marker is selected from the group consisting of an enzyme, a radioactive label, a fluorescent label, a luminescent label, a phosphorescent label, a chromophoric label, a metal sol label, a metal-binding label, a physical label, an electronic label, and a ligand.

12. The method of Claim 1, wherein said recombinant antigen further comprises a detectable marker.

13. The method of Claim 1, wherein said method is conducted within about one day.

14. The method of Claim 1, wherein said method is conducted within about one hour.

15. The method of Claim 1, wherein said method is conducted in a time period of between about one minute and about fifteen minutes.

16. The method of Claim 1, wherein said recombinant antigen is selected from the group consisting of a recombinant viral antigen, a recombinant bacterial antigen, a recombinant fungal antigen, a recombinant endoparasite antigen, and a recombinant ectoparasite antigen.

17. The method of Claim 1, wherein said recombinant antigen is a recombinant viral antigen.

18. The method of Claim 1, wherein said recombinant antigen is selected from the group consisting of a calicivirus protein, a distemper virus protein, a herpesvirus protein, a leukemia virus protein, and a parvovirus protein.

19. The method of Claim 1, wherein said recombinant antigen is selected from the group consisting of a feline calicivirus capsid protein, a feline herpesvirus glycoprotein B protein, a feline herpesvirus glycoprotein C protein, a feline herpesvirus glycoprotein D protein, a feline parvovirus VP12 protein, a feline parvovirus VP2 protein, a feline leukemia virus p27 protein, a feline leukemia virus gp70 protein, a feline leukemia virus p27-gp70 fusion protein, a canine distemper virus fusion protein, and a canine distemper virus hemagglutinin protein.

20. The method of Claim 1, wherein said recombinant antigen is selected from the group consisting of $PFCVCP_{671}$, $PFCVCP_{547}$, $PFPVVP2_{584}$, $PFPVVP2C_{243}$, $PFPVpVP12_{620}$, $PFPVpVP2_{477}$, $PFHVgB_{943}$, $PFHVgB_{250}$, $PFHVgC_{534}$, $PFHVgC_{467}$, $PFHVgC_{467(opt)}$, $PFHVgD_{374}$, $PFHVgD_{300}$, $PFeLVp27_{253}$, $PFeLVp27_{619}$, $PFeLVp27\text{-}gp70_{611}$, $PCDVH_{604}$, $PCDVF_{662}$, $PHis\text{-}PFCVCP_{671}$, $PHis\text{-}PFCVCP_{547}$, $PHis\text{-}PFPVVP2_{584}$, $PHis\text{-}PFPVVP2C_{243}$, $PHis\text{-}PFPVpVP12_{620}$, $PHis\text{-}PFPVpVP2_{477}$, $PHis\text{-}PFHVgB_{943}$, $PHis\text{-}PFHVgB_{250}$, $PHis\text{-}PFHVgC_{534}$, $PHis\text{-}PFHVgC_{467}$, $PHis\text{-}PFHVgC_{467(opt)}$, $PHis\text{-}PFHVgD_{374}$, $PHis\text{-}PFHVgD_{300}$, $PHis\text{-}PFeLVp27_{253}$, $PHis\text{-}PFeLVp27_{619}$, $PHis\text{-}PFeLVp27\text{-}gp70_{611}$, $PHis\text{-}PCDVH_{604}$, and $PHis\text{-}PCDVF_{662}$.

21. The method of Claim 1, wherein said recombinant antigen comprises an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30, SEQ ID NO:32, SEQ ID NO:34 and SEQ ID NO:36.

22. The method of Claim 1, wherein said recombinant antigen is encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:23, SEQ ID NO:25, SEQ ID NO:27, SEQ ID NO:29, SEQ ID NO:31, SEQ ID NO:33, and SEQ ID NO:35.

23. The method of Claim 1, wherein said biological specimen is contacted with a recombinant calicivirus antigen, a recombinant herpesvirus antigen and a recombinant

parvovirus antigen under conditions such that the immune status of said animal to calicivirus, herpesvirus and parvovirus infection is determined.

24. A method to determine whether to vaccinate an animal, said method comprising the steps of:

(a) contacting a biological specimen of said animal with a recombinant infectious agent antigen that is specific for detecting an antibody selective for said infectious agent, under conditions suitable for formation of a complex between said recombinant antigen and said antibody; and

(b) detecting the presence or absence of said complex, wherein presence of said complex indicates that said animal need not be vaccinated and wherein absence of said complex indicates that said animal should be vaccinated.

25. The method of Claim 24, wherein said step of detecting comprises applying a detection reagent that binds to said complex, if present, to obtain a test signal, wherein presence of said test signal indicates that said animal need not be vaccinated and wherein absence of said test signal indicates that said animal should be vaccinated.

26. A recombinant antigen comprising a recombinant protein having an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30, SEQ ID NO:32, SEQ ID NO:34, SEQ ID NO:36, and an amino acid sequence encoded by an allelic variant of a nucleic acid sequence encoding any of said amino acid sequences.

27. The recombinant antigen of Claim 26, wherein said recombinant antigen is encoded by a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:23, SEQ ID NO:25, SEQ ID NO:27, SEQ ID NO:29, SEQ ID NO:31, SEQ ID NO:33, and SEQ ID NO:35, a nucleic acid molecule comprising an allelic variant of a nucleic acid molecule comprising any of said nucleic acid sequences, and a nucleic acid molecule comprising a degenerate of a nucleic acid molecule comprising any of said nucleic acid sequences.

28. A nucleic acid molecule selected from the group consisting of: (a) a nucleic acid molecule encoding a protein of Claim 26; (b) a nucleic acid molecule encoding a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ

ID NO:26, SEQ ID NO:28, SEQ ID NO:30, SEQ ID NO:32, SEQ ID NO:34 and SEQ ID NO:36; (c) a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:23, SEQ ID NO:25, SEQ ID NO:27, SEQ ID NO:29, SEQ ID NO:31, SEQ ID NO:33, and SEQ ID NO:35; (d) a nucleic acid molecule comprising an allelic variant of a nucleic acid molecule of (c); (e) a nucleic acid molecule comprising a degenerate of a nucleic acid molecule of (c); and (f) a nucleic acid molecule fully complementary to any of said nucleic acid molecules of (a), (b), (c), (d) or (e).

29. A recombinant molecule comprising a nucleic acid molecule of Claim 28.

30. A recombinant cell comprising a nucleic acid molecule of Claim 28.

31. A method to produce a recombinant antigen of Claim 26, said method comprising culturing a recombinant cell of Claim 30 and recovering said recombinant antigen.

32. The recombinant antigen of Claim 26, wherein said recombinant antigen further comprises a component selected from the group consisting of a fusion segment and a ligand.

33. The recombinant antigen of Claim 26, wherein said recombinant antigen further comprises a detectable marker.

34. An assay to determine the immune status of an animal, said assay comprising:

(a) a recombinant infectious agent antigen that is specific for detecting an antibody selective for said infectious agent, presence of said antibody being indicative of the immune status of said animal; and

(b) a means to detect an antibody that selectively binds to said recombinant antigen.

35. The assay of Claim 34, wherein said means comprises a detection reagent.

36. The assay of Claim 34, wherein said assay further comprises:

(a) a solid support comprising a test area and a reference area; and

(b) a reference reagent.

37. The assay of Claim 34, wherein said test area comprises said recombinant antigen.

38. The assay of Claim 34, wherein said assay further comprises a control area for assay validation.

39. The assay of Claim 34, wherein said recombinant antigen comprises a recombinant protein selected from the group consisting of $PFCVCP_{671}$, $PFCVCP_{547}$, $PFPVVP2_{584}$, $PFPVVP2C_{243}$, $PFPVpVP12_{620}$, $PFPVpVP2_{477}$, $PFHVgB_{943}$, $PFHVgB_{250}$, $PFHVgC_{534}$, $PFHVgC_{467}$, $PFHVgC_{467(opt)}$, $PFHVgD_{374}$, $PFHVgD_{300}$, $PFeLVp27_{253}$, $PFeLVp27_{619}$, $PFeLVp27\text{-}gp70_{611}$, $PCDVH_{604}$, and $PCDVF_{662}$.